

PATENT COOPERATION TREATY

PCT

REC'D 26 OCT 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT PCT
(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference PD020062 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/EP 03/06558 | International filing date (day/month/year) 21.06.2003 | Priority date (day/month/year) 04.07.2002 |
| International Patent Classification (IPC) or both national classification and IPC H04N5/92 | | |
| Applicant THOMSON LICENSING S.A. et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 9 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 5 sheets.

3. This report contains indications relating to the following items:

- I Basis of the opinion
- II Priority
- III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV Lack of unity of invention
- V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI Certain documents cited
- VII Certain defects in the international application
- VIII Certain observations on the international application

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| Date of submission of the demand 19.11.2003 | Date of completion of this report 25.10.2004 |
| Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Loeser, E Telephone No. +49 89 2399-8482 |



INTERNATIONAL PRELIMINARY
EXAMINATION REPORT

International application No. PCT/EP 03/06558

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-19 as originally filed

Claims, Numbers

1-13 received on 10.07.2004 with letter of 08.07.2004

Drawings, Sheets

1-11 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

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5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|------|--------|------|
| Novelty (N) | Yes: | Claims | 1-13 |
| | No: | Claims | |
| Inventive step (IS) | Yes: | Claims | 1-13 |
| | No: | Claims | |
| Industrial applicability (IA) | Yes: | Claims | 1-13 |
| | No: | Claims | |

2. Citations and explanations

see separate sheet

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1. General

The claims are considered to satisfy the criteria set forth in Article 33 PCT under the assumption of clarifications being carried out.

The following documents are cited:

D1: US-A-2001/0038742;

D2: EP-A-0 977 433;

D3: GB-A-2 361 095;

D4: EP-A-1 049 320.

2. Claim 1

Claim 1 is considered to provide the following effective features (comments, interpretations, and objections by the undersigning examiner provided in parentheses):

(a) A method for linking first and second multimedia data, wherein the multimedia data comprise video, still picture, and/or audio data,

(linking of multimedia data is a task generally known from non-linear editing systems such as disclosed as prior art in D1 (cols. 1-2).

(b) the method including the following steps carried out within a consumer electronics device (200):

(Consumer electronics device has a broad scope and can comprise a camera, or a personal computer capable of processing and storing multimedia data, as devices known from the prior art. One might attempt to make a distinction between professional and consumer electronic equipment, however, technically there is no clear border therebetween.)

(c) recording first multimedia data on a first storage medium;

(The type of storage medium is not limited and encompasses fixed or removable media, a tape, a CD or the like, a hard disk device, a semiconductor memory, etc.)

(d) detecting a user selection of a portion of said first multimedia data;

(This is an action that is known from non-linear editing.

When assuming that the first multimedia data represent data to be inserted into second multimedia data a user must firstly identify/select the first data to be inserted. This is accomplished eg. by detecting a user's selection from a list of pictures, or from a display of thumbnails.)

(e) detecting a user selection of an insert mode;

(A step that is also known from non-linear editing, wherein different insert modes such as soft or hard blending etc. of a selected picture into second multimedia data.)

(f) automatically creating link information to said selected portion of first multimedia data, the link information containing a reference to said portion of multimedia data on said first storage medium,

(After a user's selection of the portion of the first multimedia data, the portion must be accessed on the respective storage medium. This requires a translation of the selection information into a corresponding storage address for accessing the first storage medium for retrieval of the selected portion of data. In a consumer electronic device, such as a digital camera capable of displaying selectable thumbnails, or a PC, upon selection of the image an address pointer to the storage means is automatically created and the information retrieved - the address pointer corresponds to the claimed link information.

Reference is made to the second comment on feature (g1) set out below).

(g) generating second multimedia data after said first multimedia data were recorded on the first storage medium;

(With a consumer electronics device, such as e.g. the aforementioned digital camera, it is known to firstly shoot and record still images, as the first multimedia data, and subsequently a video film, as the second multimedia data.)

(g1) the generating being in real-time;

("real-time" can be interpreted as being carried out

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while the user operates the consumer electronics device - the technical limitations intended the feature are fully obscure. Thus Art. 6 PCT is contravened and the feature must be ignored for the purposes of examination.

According to p.3 lines 16-20 "the linking information may be formed in real-time while recording the video on the tape". Here, "real-time" can be associated with simultaneity of steps, and a corresponding amendment to feature (f) would be acceptable).

(h) inserting, according to the selected insert mode, into said second multimedia data

(ha) either said automatically created link information,

(hb) or said selected first portion of first multimedia data referenced by said link information;

(In the previously known non-linear editing it is fundamental to insert the selected information into the second multimedia data - see the comments to feature (d). Therefore feature (h)/(hb) taken alone is known in the art.

It is not clear whether features (ha) and (hb) are options selectable by a user, or whether they represent mutually exclusive steps which cannot be selected by a user - Art. 6 PCT contravened.

From the application on file - p.2 lines 13-23, Fig.2, p.3 lines 4-15 - it is concluded that the invention and thus features (h)/(ha)/(hb) are intended to allow/enable an insertion into the second multimedia data of "said link information", which contains a reference to content stored on the first storage medium (feature (ha)). A corresponding, clarifying amendment to the claim is considered to be required. That is, the method should be clarified to allow at least insertion of the link information. Such an amendment would also establish a clear distinction over the prior art non-linear editing system cited above).

(I) storing on a second storage medium multimedia data resulting from said second multimedia data and said inserted information,

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(This is an inherent feature of any known non-linear editing system)

(i1) wherein said second storage medium is removable independently from said first storage medium

(The feature alludes to the second storage medium being removable, whereas there is no information as to removability of the first storage medium - according to the description, both storage media appear to be removable and independent of each other. Notwithstanding the above, it is considered that in the known non-linear editing, a storage medium corresponding to the claimed second storage medium must be provided as an output medium, and a first storage medium for pre-storing content is also considered to be implicit therein. Moreover, even a hard disk built into an apparatus can be seen to be removable from the apparatus, at least for the purpose of replacement. Thus the term "removable" is considered to merely establish the second storage medium as being physically distinct from the first medium).

The aforementioned known non-linear editing system can be a personal computer or the like, ie a consumer electronics device. Taking account of the fact that such a non-linear editing system is not fully shown in the presently available documents - this holds in particular for the feature of generating images in the device, novelty of the claimed subject-matter in respect of the known system is conceded.

An inventive step can also be acknowledged in respect of the known non-linear editing system, provided that feature (h) is clarified to include a feature corresponding to "enabling/allowing inserting at least said link information" into the second multimedia data.

As to the written prior art (D1-D4):

D1 [0108] discloses recording additional information, such as a "take number", in an area of a semiconductor memory attached to a video tape. Moreover [0109], between mark-in and mark-out

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points of the video tape, additional information can be recorded, and (Fig.32: Ref.93; [0076-0077, 0161-0164]) index picture information can be inserted in the video material when recording the video track. Such index picture information appears to be a picture or an overview of pictures from the video being edited, which do not represent other, independent information stored on a separate storage medium, and thus does not appear to include link information as specified in claim 1 on file.

D2 (Figs.10,11 and related text; [0051]) discloses a video camera for recording motion images on a video tape and still image on an IC card. Still images are recorded along with relation information e.g. associated with a recording location.

D3 pertains to recording information signals onto a linear recording medium (such as a video tape) and to record metadata associated with the information signals onto the linear recording medium with the information signals, essentially for the purpose of navigating through the recorded signals. D3 does not appear to disclose inserting and storing link information, on a second storage medium, that points to information stored on a separate, first storage medium.

D4 (abstract; Fig.27; p.42-43; [0323-0328, 0333-0336]) discloses automatically creating, upon a user selection of a multimedia object, link information (URL, address information) which is subsequently inserted/embedded in multimedia data so as to enable, when reproducing the multimedia data, accessing a remote computer via the Internet for retrieving other, independently stored information associated with the link information.

In respect of claim 1 on file, D4 does not appear to disclose recording first, and generating second, multimedia data within a consumer electronics device, and does not appear to disclose recording on different, partly removable, storage media.

Following from the above, the claimed subject-matter must be considered novel (Art. 33 (2) PCT).

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The claimed concept of inserting link information, pointing to first multimedia data, in second multimedia data being known from D4, and recording multimedia data having inserted link information establishing links to the recorded information being known from D1, it is considered that a skilled person could have considered the concept set out in claim 1 on file, using his/her ordinary design skills. However, there is doubt as to whether a skilled person would have combined the teachings of D4 and D1 and would have unambiguously arrived at the claimed subject-matter.

Following from the above, it is concluded that the subject-matter of claim 1 (after clarification as pointed out above), would also meet the requirements set out in Article 33(3) PCT.

3. Claims 2-13

The above findings in respect of claim 1 also apply to corresponding apparatus claim 8, and dependent claims 2-7 and 9-12.

As to claim 13, it is considered that a dependency upon one or more of claims 8-12 ("Video camera or camcorder according to any of claims 8-12") has been accidentally omitted. Under the assumption that such a dependency is established, the claim would also meet the requirements set out in Article 33 PCT.

4. Further comments

The claims are not drafted in the two-part form.
The description is not matched with the amended claims, Rule 5.1a.iii PCT.

The prior art (D1-D4) is not identified and summarized in the description, Rule 5.1a.ii PCT.

New Claims

1. Method for linking first and second multimedia data within a consumer electronics device, wherein the multimedia data comprise video, still picture and/or audio data, including the steps of
 - recording the first multimedia data on a first storage medium (207);
 - detecting (601) a user selection of a portion of said first multimedia data;
 - detecting a user selection of an insert mode (602, 603, 604);
 - creating (209) automatically link information to said selected portion of first multimedia data, the link information containing a reference to said portion of multimedia data on said first storage medium (207);
 - generating (200) in real-time second multimedia data, after said first multimedia data were recorded on the first storage medium (207);
 - inserting (210) according to the selected insert mode into said second multimedia data either said automatically created link information or said selected first portion of first multimedia data referenced by said link information; and
 - storing (201, 210) on a second storage medium (202) multimedia data resulting from said second multimedia data and said inserted information, wherein said second storage medium (202) is removable independently from said first storage medium (207).
2. Method according to claim 1, wherein the step of detecting (601) a user selection of a portion of said first multimedia data comprises detecting a user selection of one

or more candidate portions of said first multimedia data, storing said selected candidate portions or references thereon on the first storage medium (207), and detecting a user selection of one of said one or more candidate portions as logo or index data portion.

3. Method according to claim 1 or 2, wherein said automatically created link information or said reference thereon is stored in a reserved memory space (302) on said second storage medium (202), the memory space (302) relating to a single video frame.
4. Method according to any of claims 1-3, further comprising the steps of
 - creating (209) automatically second link information, the second link information containing a reference (424) to a portion of the first multimedia data and, if said portion of the first multimedia data was selected by the user, a reference (423) to the second multimedia data on said second storage medium (202);
 - storing (211) said second link information on said first storage medium (207).
5. Method according to the preceding claim, wherein a first file (410) and a second file (420) are created and stored on the first storage medium (207), the first file (410) containing a list of references (424) to the portions of said first multimedia data, and the second file (420) containing a list of references (424) of selected portions of the first multimedia data and said references (423) to the second multimedia data on said second storage medium (202), wherein the references (423) indicate particular

portions (426) of the second multimedia data.

6. Method according to any of the preceding claims, wherein said first multimedia data is a still picture or photo or a picture sequence, such as a short video or cartoon.
7. Method according to any of the preceding claims, wherein a status label (429) is associated with each portion of recorded first multimedia data, the status label (429) indicating whether the respective portion is selected, and wherein a portion of recorded first multimedia data having selected status is protected from being deleted.
8. Video camera or camcorder (200), comprising:
 - means (206) for recording first multimedia data on a first storage medium (207);
 - means for detecting a user selection of a portion of said first multimedia data;
 - means for detecting (601) a user selection of an insert mode;
 - means for creating (209) automatically link information to said selected portion of first multimedia data, the link information containing a reference to said portion of multimedia data recorded on said first storage medium (207);
 - camera means for generating (200) in real-time second multimedia data;
 - means for inserting (210) according to the selected insert mode into said second multimedia data either said automatically created link information or said selected first portion of first multimedia data referenced by said link information; and

- means for storing (201,210) on a second storage medium (202) multimedia data resulting from said second multimedia data and said inserted information, wherein said second storage medium (202) is separately removable and different from said first storage medium (207).

9. Video camera or camcorder according to the preceding claim, wherein the means for detecting (601) a user selection of a portion of said first multimedia data comprises

- means for detecting a user selection of one or more candidate portions of said first multimedia data;
- means for initiating the storing of said selected candidate portions or references thereon on the first storage medium (207);
- means for detecting a user selection of one or more of said one or more candidate portions as logo or index data portions; and
- means for initiating the storing of the selected logo or index data portion on the first storage medium (207), wherein the selected candidate portions or references thereon are stored in a first file (410) and the selected logo or index data portions or reference thereon are stored in a separate second file (420) on the first storage medium (207).

10. Video camera or camcorder according to claim 8 or 9, wherein said means for storing (201,210) on a second storage medium (202) the resulting multimedia data stores said automatically created link information or reference thereon in a reserved memory space (302) of said second storage medium (202), the memory space (302) relating to a single video frame.

11. Video camera or camcorder (200) according to any of the claims 8-10, further comprising

- means for playing back the recorded second multimedia data having said information inserted; and
- means for simultaneously playing back the portion of the first multimedia data identified by said reference (302), wherein the identified portion of first multimedia data is built into the second multimedia data.

12. Video camera or camcorder according to any of claims 8-11, further comprising:

- means (209) for automatically creating second link information, the second link information containing a reference (424) to a portion of the first multimedia data and, if said portion of the first multimedia data was selected by the user, a reference (423) to the second multimedia data on said second storage medium (202); and
- means (211) for storing said second link information on said first storage medium (207).

13. Video camera or camcorder (200), further comprising

- a view finder, wherein said multimedia data resulting from said second multimedia data and said inserted information can be displayed on the view finder while being recorded; and
- means for setting the inserted information visible or invisible in the view finder.